



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/015,689	12/17/2001	Chang Sik Cho	123056-05004485	8069	
43569	43569 7590 03/10/2006			EXAMINER	
MAYER, BROWN, ROWE & MAW LLP			PARRY, CHRISTOPHER L		
1909 K STRE	ET, N.W. DN. DC 20006		ART UNIT	PAPER NUMBER	
	, =		2614		

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)			
	10/015,689	CHO ET AL.			
Office Action Summary	Examiner	Art Unit			
	Chris Parry	2614			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
<ul> <li>1) ⊠ Responsive to communication(s) filed on 17 De</li> <li>2a) ☐ This action is FINAL.</li> <li>2b) ☒ This</li> <li>3) ☐ Since this application is in condition for allowant closed in accordance with the practice under Expression.</li> </ul>	action is non-final. ace except for formal matters, pro				
Disposition of Claims					
4)  Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-14 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on 17 December 2001 is/ar Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the option of of the optio	re: a) $\square$ accepted or b) $\square$ objected are along accepted or b) sobjected are accepted by the drawing accepted if the drawing (s) is objected as $\square$	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/17/01, 02/02/04.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

#### **DETAILED ACTION**

# Priority

1. Receipt is acknowledged of a certified copy of the 2001-58241 application referred to in the oath or declaration or in an application data sheet. If this copy is being filed to obtain the benefits of the foreign filing date under 35 U.S.C. 119(a)-(d), applicant should also file a claim for such priority as required by 35 U.S.C. 119(b). If the application being examined is an original application filed under 35 U.S.C. 111(a) (other than a design application) on or after November 29, 2000, the claim for priority must be presented during the pendency of the application, and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application. See 37 CFR 1.55(a)(1)(i). If the application being examined has entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and Regulations of the PCT. See 37 CFR 1.55(a)(1)(ii). Any claim for priority under 35 U.S.C. 119(a)-(d) or (f) or 365(a) or (b) not presented within the time period set forth in 37 CFR 1.55(a)(1) is considered to have been waived. If a claim for foreign priority is presented after the time period set forth in 37 CFR 1.55(a)(1), the claim may be accepted if the claim properly identifies the prior foreign application and is accompanied by a grantable petition to accept an unintentionally delayed claim for priority. See 37 CFR 1.55(c).

Application/Control Number: 10/015,689 Page 3

Art Unit: 2614

#### **Drawings**

- 2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **S402** in figure 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/015,689 Page 4

Art Unit: 2614

## Specification

4. The abstract of the disclosure is objected to because on line 9, "can not" should be –cannot--. Correction is required. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities: On page 1, line 18, "system may provides" should be --system may provide--. On page 2, line 1, "VOD service may includes" should be --VOD service may include--. On page 6, lines 21 and 24, "informations" should be --information--. On page 7, line 12, "informations" should be --information--. On page 9, line 2, "informations" should be --information--. On page 15, line 7, "an VCR" should be --a VCR--. On page 16, line 10, "When every available channel provided" should be --When all available channels provided--. On page 16, line 14, "will connected to session of a client" should be --will connect to a session of a client. On page 18, line 18, "Fig. 4" should be --Fig. 5--. On page 19, line 20, "for every sessions which share the regular channel" should be --for every session that shares the regular channel--. On page 20, line 12, "step S206 do not fall within" should be --step S306 does not fall within--.

Appropriate correction is required.

# Claim Objections

6. Claim 4 is objected to because of the following informalities: On page 25, line 4, "informations" should be --information-- appropriate correction is required.

Application/Control Number: 10/015,689 Page 5

Art Unit: 2614

7. Claim 5 is objected to because of the following informalities: On page 25, line 8, "informations" should be --information--. Appropriate correction is required.

- 8. Claim 9 is objected to because of the following informalities: On page 26, line 5, "informations" should be --information--. Appropriate correction is required.
- 9. Claim 14 is objected to because of the following informalities: On page 28, line 9, "informations" should be --information--. Appropriate correction is required.

## Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The applicant's disclosure fails to enable one of ordinary skill in the art to comprehend how the transmission pause of the video information performs pausing as duration as the obtained stable pause enable time as recited in claim 2.

To further prosecution, the examiner will interpret the claim to read on if the interval of pause of the session is longer the stable pause enable time, the primary session loses its qualification and a secondary session obtains its qualification as a new primary session as described on page 20, lines 5-9.

#### Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims 1-3 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. "Li" (U.S. 6,543,053) in view of Fritsch (U.S. 6,973,667).

Regarding Claim 1, Li discloses a pause method in a video system (200 – figure 2) using a regular channel (1002 – figure 10A) and a patched channel (1004 – figure 10A) (Col. 11, lines 37-53). Li further teaches, "in response to result of the determination, examining a stable pause enable time, if the session is the single primary session in the regular channel" by disclosing if the user is accessing video i which is being served on the original S stream or "primary session in the regular channel" and a pause request is received, the system determines "the stable pause enable time" by determining the maximum size of storage available in synch buffer 210 for the user (Col.

11, lines 32-40). Li further discloses synch buffer 210 can reside on a users set-top box and vary in size depending on the individual user's needs (Col. 6, lines 33-43).

Li teaches, "in response to result of the examination, after pausing transmission of the video data to the client via the regular channel, obtaining an actual video transmission pause time and comparing it with the obtained stable pause enable time" by disclosing when the user requests to resume normal play (Case 1a in figure 9A), the system determines if d, the actual video transmission pause time, is less than t, the obtained stable pause enable time (Col. 11, lines 43-47). Li discloses d, the actual video transmission pause time, to be the time from when the pause was issued to the time where the resume request was made as shown in figure 10A. Further, Li discloses t, the obtained stable pause time, to be the maximum number of minutes of video i that can be stored in the synch buffer (Col. 6, lines 31-43).

Li teaches, "in response to result of the comparison, transferring the video data to the client via the regular channel, after releasing the pause, if the obtained stable pause enable time is longer than the actual transmission pause time" by disclosing if system 200 determines that d < t as described for Case 1a and shown in figures 9A and 10B, then SAM (i.e., SAM Controller 220 – figure 2) directs the user to retrieve the video from synch buffer 210 (Col. 11, lines 43-53).

Li fails to explicitly disclose determining if a current session of an associated client is a single primary session in the regular channel, when receiving ID of the session and a reproduction position of a video from the client. In an analogous art,

Fritsch discloses when a pause has been requested; the pause attributes are recorded from the user. The pause attributes include, a time-of-pause or "reproduction position" which indicates the time when the pause operation was request, an IP address or "receiving ID" which identifies the client device that requested the pause operation, and a media stream identifier (Col. 8, lines 34-45). The media stream identifier reads on identifying whether a current session of an associated client is a single primary session in the regular channel because the media stream identifier is an identifier that indicates a particular channel that was being viewed when the pause operation was requested. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li to include receiving ID of the session and a reproduction position of a video from the client as taught by Fritsch for the benefit of allowing video servers to identify client devices that make the pause request in order to provide the client device with the requested operation.

As for Claim 2, Li teaches, "the transmission pause of the video information performs pausing as duration as the obtained stable pause enable time" by disclosing if the user is still in pause mode when the corresponding play point of the earliest of these eligible S streams is played, or d > t as shown if figure 10C, the user is split out from the original S stream and merged to the targeted ongoing S stream (Col. 11, lines 54-61).

As for Claim 3, Li teaches, "in which the stable pause enable time is the time which reproduction position of secondary session of the regular channel is subtracted from the transmission position of the regular channel" by disclosing t, the stable pause enable time, is equal to targeted S stream 1004 at segment 4 or "reproduction position of secondary session of the regular channel" is subtracted from the original S stream 1002 at segment 7 or "transmission position of the regular channel", so therefore t is equal to three segments as shown in figure 10A.

Regarding Claim 9, Li discloses a video data transfer resume method in a video system (200 – figure 2) (Col. 11, lines 37-53). Li teaches, "determining, when a video reproduction is temporarily paused, if a video reproduction signal is received, after receiving information including paused position" by disclosing synch buffer 210 begins to store video at the point the pause was issued at time  $t_o$  as shown in figure 10A (Col. 11, lines 37-42).

Li further teaches, "comparing the paused position with a predetermined stable pause enable time, when the video reproduction signal can be received within the predetermined stable pause enable time" by disclosing system 200 uses the pause position to calculate the actual pause time *d*. The value *d* is then compared to the value of *t*, the predetermined stable pause enable time, to determine if the original S stream 1002 can be received within the predetermined stable pause enable time as disclosed in Case 1A (Col. 11, lines 43-53).

Li teaches, "in response to result of the comparison, determining if it is a single primary session in which associated client shares the regular channel, when the paused time falls within the stable pause enable time" by disclosing if the client is receiving original S stream 1002 and system 200 determines before the buffer is full or "within the stable pause enable time" if a resume command has been issued (S920 – figure 9A) (Col. 11, lines 43-47).

Li teaches, "in response to result of the determination, resuming transfer in the regular channel and adjusting patched lengths of sessions sharing the regular channel, when it is the single primary session" by disclosing when the user requests a resume operation, the video is retrieved from the synch buffer and the patched length is adjusted to allow for the synch buffer and original S stream 1002 to create a virtual stream for the interactive user (Col. 11, lines 45-53).

Li teaches, "transferring the patched length, the regular channel and patched channel value, which are adjusted, as pause enable resume value to the client" by disclosing segments 3-4 or "patched length" from the synch buffer are transferred to the client along with the original S stream 1002 value or "regular channel value" and the virtual stream value or "patched channel value" (Col. 11, lines 50-53). These values must be transferred to the client to facilitate the retrieval of these streams or channels by the set-top box.

However, Li fails to disclose determining, when a video reproduction is temporarily paused, if a video reproduction signal is received, after receiving information

including session ID and paused time. In an analogous art, Fritsch discloses when a pause has been requested; the pause attributes are recorded from the user. The pause attributes include, a time-of-pause or "paused time" which indicates the time when the pause operation was requested and an IP address or "receiving ID" which identifies the client device that requested the pause operation (Col. 8, lines 34-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li to include a receiving ID of the session and a paused time of a video from the client as taught by Fritsch for the benefit of allowing video servers to identify client devices that make the pause request in order to provide the client device with the requested operation and corresponding video stream.

As for Claim 10, Li teaches, "determining if only the regular channel exists in the associated client" by disclosing the server can determine whether the client is currently only receiving a real video stream 302 "regular channel" or whether the client is receiving both a real video stream 302 and a virtual stream 306 (Col. 7, lines 7-13).

Li further teaches, "adding the pause enable time of the video reproduction to the patched length, when both of the regular channel and the patched channel exist" by disclosing if the user is still in pause mode when the corresponding play point is reached in a successive targeted S stream 1004, the pause enable time is added to the patched length (Col. 11, lines 54-67). Further, when a targeted S stream 1004 or "patched channel" exists, the current stored segments are added to the patched length of the targeted S stream (Col. 12, lines 1-5).

As for Claim 11, Li teaches, "in which in the patched channel, position information, which the pause enable time is added to the current reproduction position of the current client, is transferred and the video data can be stored in the disk during process of patching" by disclosing when the client is merged with the targeted S stream 1004, the position information is used to determine the position in the video where the targeted S stream should begin to store video segments on the synch buffer or "disk" of the client's set-top box (Col. 11, lines 54-67).

As for Claim 12, Li teaches, "performing jump operation for the pause enable position and creating a new regular channel and a new patched channel" by disclosing if the buffer is filled before the pause ends, a new S stream may need to be initiated (Col. 12, lines 8-12).

Li further teaches, "transferring information of waiting time to the client as video reproduction operation value via the new regular channel and the new patched channel" by disclosing when a new original S stream or "new regular and patched channel" become available the client is merged on to the new original S stream which begins to fill the buffer after the buffer has been purged (Col. 12, lines 12-26).

Regarding Claim 13, Li teaches, a program storage device (102 and 107 – figure 2) readable by a machine 220 – figure 2), tangibly embodying a program of instructions executable by the machine to perform method steps for providing for pause/resume of video reproduction in video system using a regular channel (1002 – figure 10A) and a patched channel (1004 – figure 10A) (Col. 6, lines 8-17 and Col. 7, lines 23-31).

Li teaches, "in response to result of the determination, examining a stable pause enable time, if the session is the single primary session in the regular channel" by disclosing if the user is accessing video i which is being served on the original S stream or "primary session in the regular channel" and a pause request is received, the system determines "the stable pause enable time" by determining the maximum size of storage available in synch buffer 210 for the user (Col. 11, lines 32-40). Li further discloses synch buffer 210 can reside on a users set-top box and vary in size depending on the individual user's needs (Col. 6, lines 33-43).

Li teaches, "in response to result of the examination, after pausing transmission of the video data to the client via the regular channel, obtaining an actual video transmission pause time and comparing it with the obtained stable pause enable time" by disclosing when the user requests to resume normal play (Case 1a in figure 9A), the system determines if *d*, the actual video transmission pause time, is less than *t*, the obtained stable pause enable time (Col. 11, lines 43-47). Li discloses *d*, the actual video transmission pause time, to be the time from when the pause was issued to the time where the resume request was made as shown in figure 10A. Further, Li discloses *t*, the

obtained stable pause time, to be the maximum number of minutes of video i that can be stored in the synch buffer (Col. 6, lines 31-43).

Li teaches, "in response to result of the comparison, transferring the video data to the client via the regular channel, after releasing the pause, if the obtained stable pause enable time is longer than the actual transmission pause time" by disclosing if system 200 determines that d < t as described for Case 1a and shown in figures 9A and 10B, then SAM (i.e., SAM Controller 220 – figure 2) directs the user to retrieve the video from synch buffer 210 (Col. 11, lines 43-53).

Li fails to explicitly disclose determining if a current session of an associated client is a single primary session in the regular channel, when receiving ID of the session and a reproduction position of a video from the client. In an analogous art, Fritsch discloses when a pause has been requested; the pause attributes are recorded from the user. The pause attributes include, a time-of-pause or "reproduction position" which indicates the time when the pause operation was request, an IP address or "receiving ID" which identifies the client device that requested the pause operation, and a media stream identifier (Col. 8, lines 34-45). The media stream identifier reads on identifying whether a current session of an associated client is a single primary session in the regular channel because the media stream identifier is an identifier that indicates a particular channel that was being viewed when the pause operation was requested. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li to include receiving ID of the session and a reproduction position of a video from the client as taught by Fritsch for the benefit of

allowing video servers to identify client devices that make the pause request in order to provide the client device with the requested operation.

Regarding Claim 14, Li discloses a program storage device (102 and 107 – figure 2) readable by a machine 220 – figure 2), tangibly embodying a program of instructions executable by the machine to perform method steps for providing for pause/resume of video reproduction in video system using a regular channel (1002 – figure 10A) and a patched channel (1004 – figure 10A) (Col. 6, lines 8-17 and Col. 7, lines 23-31).

Li teaches, "determining, when a video reproduction is temporarily paused, if a video reproduction signal is received, after receiving information including paused position" by disclosing synch buffer 210 begins to store video at the point the pause was issued at time  $t_o$  as shown in figure 10A (Col. 11, lines 37-42).

Li further teaches, "comparing the paused position with a predetermined stable pause enable time, when the video reproduction signal can be received within the predetermined stable pause enable time" by disclosing system 200 uses the pause position to calculate the actual pause time *d*. The value *d* is then compared to the value of *t*, the predetermined stable pause enable time, to determine if the original S stream 1002 can be received within the predetermined stable pause enable time as disclosed in Case 1A (Col. 11, lines 43-53).

Li teaches, "in response to result of the comparison, determining if it is a single primary session in which associated client shares the regular channel, when the paused

time falls within the stable pause enable time" by disclosing if the client is receiving original S stream 1002 and system 200 determines before the buffer is full or "within the stable pause enable time" if a resume command has been issued (S920 – figure 9A) (Col. 11, lines 43-47).

Li teaches, "in response to result of the determination, resuming transfer in the regular channel and adjusting patched lengths of sessions sharing the regular channel, when it is the single primary session" by disclosing when the user requests a resume operation, the video is retrieved from the synch buffer and the patched length is adjusted to allow for the synch buffer and original S stream 1002 to create a virtual stream for the interactive user (Col. 11, lines 45-53).

Li teaches, "transferring the patched length, the regular channel and patched channel value, which are adjusted, as pause enable resume value to the client" by disclosing segments 3-4 or "patched length" from the synch buffer are transferred to the client along with the original S stream 1002 value or "regular channel value" and the virtual stream value or "patched channel value" (Col. 11, lines 50-53). These values must be transferred to the client to facilitate the retrieval of these streams or channels by the set-top box.

However, Li fails to disclose determining, when a video reproduction is temporarily paused, if a video reproduction signal is received, after receiving information including session ID and paused time. In an analogous art, Fritsch discloses when a pause has been requested; the pause attributes are recorded from the user. The pause

Application/Control Number: 10/015,689

Art Unit: 2614

attributes include, a time-of-pause or "paused time" which indicates the time when the pause operation was requested and an IP address or "receiving ID" which identifies the client device that requested the pause operation (Col. 8, lines 34-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li to include a receiving ID of the session and a paused time of a video from the client as taught by Fritsch for the benefit of allowing video servers to identify client devices that make the pause request in order to provide the client device with the requested operation and corresponding video stream.

Page 17

14. Claims 4, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Fritsch as applied to claim 1 above, and further in view of Lee (U.S. 2003/0037331).

As for Claim 4, the combination of Li and Fritsch teach, "determining if only the current regular channel exists in the associated client, when the current session is not the single primary session of the regular channel and when the actual transmission pause time is less than the stable pause enable time" by disclosing when a client device makes a request to pause a program, the media delivery center 202 determines if only the regular channel exists, when the client session is not the single primary session of the regular channel by using the media stream identifier (Fritsch – Col. 8, lines 34-45).

Further it is determined whether the actual transmission pause time is less than the stable pause enable time (Li - Col. 11, lines 43-47).

The combination of Li and Fritsch fail to disclose in response to result of the determination, receiving and storing only video information as much as the current video information patching enable range from the regular channel, when only the current regular channel exists in the associated client. In an analogous art, Lee discloses when only a regular channel is present, the receiving client only stores video until the buffer. which can store up T<sub>R</sub> seconds of video or "patching enable range", becomes full and then the client enters an idle state (Paragraph 98). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Li and Fritsch with the teachings of Lee in order to facilitate receiving and storing only video information as much as the current video information patching enable range from the regular channel, when only the current regular channel exists in the associated client for the benefit of allowing a user to seamlessly resume a program while allowing the VOD system to locate the nearest multicast channel that is currently multicasting the video so as to facilitate merging the client with a current multicast (Lee Paragraph 99).

As for Claim 6, Li discloses "receiving video data as much as the patched length via the patched channel, and video data as much as the stable pause enable time via the regular channel" by disclosing original S stream or "regular channel" provides video

data as much as the stable pause enable time to the synch buffer and the targeted S stream or "patched channel" provides video data as much as the patched length (Col. 11, lines 54-67).

As for Claim 8, Li teaches, "the stable pause enable time is less one of size of the data received from the regular channel..." by disclosing if the user resumes play before *d* becomes longer than *t* then the stable pause enable time is less than the data received from the regular channel (Col. 11, lines 37-48).

#### Allowable Subject Matter

15. Claims 5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The art of record either alone or in combination fails to teach, disclose, or suggest the invention of claims 5 and 7 and in particular the stable pause time is equal to the patched length subtracted from the patching enable range. As to the closest art of record, the Li reference generally discloses a video on demand system that employs a split and merge protocol for supplying interactive video streams to a client. While the reference teaches the stable pause enable time is the time that the position of the targeted S stream is subtracted from the position of the original S stream; however it is

Application/Control Number: 10/015,689

Art Unit: 2614

unclear from the Li reference whether the stable pause enable time is equal to the

patched length subtracted from the patching enable range as recited in claims 5 and 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chris Parry whose telephone number is (571) 272-8328.

The examiner can normally be reached on Monday through Friday, 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Examiners Initials:

February 27, 2006

CHRISTOPHER GRANT

Page 20

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800